

# American Journal of Hypertension

JOURNAL OF THE AMERICAN SOCIETY OF HYPERTENSION

CUMULATIVE CONTENTS

NUMBER 1, JANUARY 1993

---

## ORIGINAL CONTRIBUTIONS

- 1 **Ambulatory Blood Pressure Monitoring in Normotensive and Hypertensive Type 2 Diabetics: Prevalence of Impaired Diurnal Blood Pressure Patterns**  
*Roberto Fogari, Annalisa Zoppi, Gian Domenico Malamani, Pierangelo Lazzari, Maurizio Destro, and Luca Corradi*
- 8 **Prevalence of Extracranial Carotid Artery Lesions at Duplex in Primary Aldosteronism**  
*GianPaolo Rossi, Alberto Rossi, Lucia Zanin, Alessio Calabró, Gaetano Crepaldi, and Archille C. Pessina*
- 15 **Endogenous Erythropoietin and Salt Sensitivity of Blood Pressure in Patients With Essential Hypertension**  
*Shojiro Naomi, Teruhisa Umeda, Taisuke Iwaoka, Joji Yamauchi, Yasufumi Ideguchi, Yasuko Fujimoto, Hiroshi Tokunaga, and Tatsuo Sato*
- 21 **Regulation of  $\text{Na}^+/\text{H}^+$  Exchange in Mesenteric Arteries From Spontaneously Hypertensive Rats**  
*D.R. Ellstrom, C.D. Foster, T.W. Honeyman, and C.R. Scheid*
- 28 **Hypotensive Effect of Losartan, a Nonpeptide Angiotensin II Receptor Antagonist, in Essential Hypertension**  
*Kazuo Tsunoda, Keishi Abe, Takeshi Hagino, Ken Omata, Seiichi Misawa, Yutaka Imai, and Kaoru Yoshinaga*
- 33 **Defective 3,4-Dihydroxyphenylalanine Decarboxylation to Dopamine in Hydralazine-Treated Hypertensive Patients May Be Pyridoxine Remediable**  
*Shuichi Shigetomi and Otto Kuchel*
- 41 **The Dose-Dependent Reduction in Blood Pressure Through Administration of Magnesium: A Double Blind Placebo Controlled Cross-Over Study**  
*L. Widman, P.O. Wester, B.K. Stegmayr, and M. Wirell*
- 46 **Racial Differences in Platelet Cytosolic Calcium and Calcitropic Hormones in Normotensive Subjects**  
*Arnold S. Brickman, Michael D. Nyby, Richard F. Griffiths, Kern von Hungen, and Michael L. Tuck*

# American Journal of Hypertension

JOURNAL OF THE AMERICAN SOCIETY OF HYPERTENSION

CUMULATIVE CONTENTS

NUMBER 1, JANUARY 1993

---

## ORIGINAL CONTRIBUTIONS

- 1 Ambulatory Blood Pressure Monitoring in Normotensive and Hypertensive Type 2 Diabetics: Prevalence of Impaired Diurnal Blood Pressure Patterns**  
*Roberto Fogari, Annalisa Zoppi, Gian Domenico Malamani, Pierangelo Lazzari, Maurizio Destro, and Luca Corradi*
  
- 8 Prevalence of Extracranial Carotid Artery Lesions at Duplex in Primary Aldosteronism**  
*GianPaolo Rossi, Alberto Rossi, Lucia Zanin, Alessio Calabró, Gaetano Crepaldi, and Archille C. Pessina*
  
- 15 Endogeneous Erythropoietin and Salt Sensitivity of Blood Pressure in Patients With Essential Hypertension**  
*Shojiro Naomi, Teruhisa Umeda, Taisuke Iwaoka, Joji Yamauchi, Yasufumi Ideguchi, Yasuko Fujimoto, Hiroshi Tokunaga, and Tatsuo Sato*
  
- 21 Regulation of  $\text{Na}^+/\text{H}^+$  Exchange in Mesenteric Arteries From Spontaneously Hypertensive Rats**  
*D.R. Ellstrom, C.D. Foster, T.W. Honeyman, and C.R. Scheid*
  
- 28 Hypotensive Effect of Losartan, a Nonpeptide Angiotensin II Receptor Antagonist, in Essential Hypertension**  
*Kazuo Tsunoda, Keishi Abe, Takeshi Hagino, Ken Omata, Seiichi Misawa, Yutaka Imai, and Kaoru Yoshinaga*
  
- 33 Defective 3,4-Dihydroxyphenylalanine Decarboxylation to Dopamine in Hydralazine-Treated Hypertensive Patients May Be Pyridoxine Remediable**  
*Shuichi Shigetomi and Otto Kuchel*
  
- 41 The Dose-Dependent Reduction in Blood Pressure Through Administration of Magnesium: A Double Blind Placebo Controlled Cross-Over Study**  
*L. Widman, P.O. Wester, B.K. Stegmayr, and M. Wirell*
  
- 46 Racial Differences in Platelet Cytosolic Calcium and Calcitropic Hormones in Normotensive Subjects**  
*Arnold S. Brickman, Michael D. Nyby, Richard F. Griffiths, Kern von Hungen, and Michael L. Tuck*

**52 The Lipoygenase Inhibitor Phenidone Is a Potent Hypotensive Agent in the Spontaneously Hypertensive Rat**

*Naftali Stern, Kenichi Nozawa, Michael Golub, Peter Eggena, Esther Knoll, and Michael L. Tuck*

**59 Effect of Intravenous Calcium Infusion on Indices of Activity of the Parathyroid Glands and on Urinary Calcium and Sodium Excretion in Normotensive and Hypertensive Subjects**

*Nicholas Papagalanis, Angeliki Kourti, Apostolos Tolis, Panagiotis Skopelitis, Athanasios Karabatsos, Georgia Kostoyanni, Maria Gennadiou, Moses Elisaf, and Theodoros Mountokalakis*

---

BRIEF COMMUNICATIONS

**66 Improved Accuracy of Indirect Blood Pressure Measurement in Patients With Obese Arms**

*Mikael Stolt, Göran Sjönell, Hans Åström, Stephan Rössner, and Lennart Hansson*

**72 DOCA-Salt Hypertensive Rat Hearts Altered Expression of G-Proteins**

*Madhu B. Anand-Srivastava, Jacques de Champlain, and Christelle Thibault*

---

REVIEW

**76 Family History Studies in Hypertension Research: Review of the Literature**

*Matthew F. Muldoon, Debra F. Terrell, Clareann H. Bunker, and Stephen B. Manuck*

---

EDITORIAL

**89 Commentary on Shigetomi and Kuchel's Work on DOPA Decarboxylation**

*R. Zimlichman*

---

LETTERS TO THE EDITOR

**91 Caffeine and Ambulatory Blood Pressure**

*Jack E. James*

**93 Caffeine and Ambulatory Blood Pressure: A Response to Dr. J.E. James**

*Martin G. Myers and Richard A. Reeves*

**94 The Value of the Hawksley Random-Zero Sphygmomanometer**

*A. Holmes, D.G. Beevers, and M. Beevers*

**95 Reply to Mann**

*Vito M. Campese*

**95 Validating Ambulatory Blood Pressure Monitors**

*Gary D. James, Yvette R. Schlüssel, and Thomas G. Pickering*

## NUMBER 2, FEBRUARY 1993

---

ORIGINAL CONTRIBUTIONS

**97 Increased Left Ventricular Mass in Normotensive Diabetic Patients With Autonomic Neuropathy**

*Sergio Gambardella, Simona Frontoni, Vincenza Spallone, Maria Rosaria Maiello, Erminia Civetta, Giovanni Lanza, Sima Sandric, and Guido Menzinger*

- 103 **Intravenous Erythropoietin (rHuEPO) Administration Increases Plasma Endothelin and Blood Pressure in Hemodialysis Patients**  
*Raul Carlini, Chamberlain I. Obialo, and Marcos Rothstein*
- 108 **Long-Term Effects of a Converting Enzyme Inhibitor and a Calcium Channel Blocker on Urinary Albumin Excretion in Patients With Essential Hypertension**  
*Roberto Bigazzi, Stefano Bianchi, Duccio Baldari, Gianpaolo Sgherri, Giorgio Baldari, and Vito M. Campese*
- 114 **Ambulatory Blood Pressure Monitoring in Offspring of Hypertensive Patients: Relation to Left Ventricular Structure and Function**  
*Maurizio Galderisi, Aldo Celentano, Paolo Tammaro, Gian Francesco Mureddu, Mario Garofalo, Giovanni de Simone, and Oreste de Divitiis*
- 121 **Combined Effects of Dietary Fish Oil and Sodium Restriction on Blood Pressure in Enalapril-Treated Hypertensive Rats**  
*Anne M. Marley, Paul F. Rogers, Yvonne K. Lungershausen, and Peter R.C. Howe*
- 127 **Diurnal Blood Pressure Variability and Physical Activity Measured Electronically and by Diary**  
*Daniel D. Gretler, Glenn F. Carlson, Antonio V. Montano, and Michael B. Murphy*
- 134 **Identification and Purification of Parathyroid Hypertensive Factor From Organ Culture of Parathyroid Glands From Spontaneously Hypertensive Rats**  
*Christina G. Benishin, Teresa Labedz, Dalton D. Guo, Richard Z. Lewanczuk, and Peter K.T. Pang*
- 141 **Hormonal Regulation of Expression of the Angiotensinogen Gene in Cultured Mouse Hepatoma Cells**  
*Ming Ming, Roy Sikstrom, Silvana Lachance, Aline Delalandre, Serge Carrière, and John S.D. Chan*
- 149 **Noninvasive Ambulatory 24 h Blood Pressures and Basal Blood Pressures Predict Development of Sustained Hypertension From a Borderline State**  
*Ulf de Faire, Kaj Lindvall, and Bo Nilsson*
- 156 **Endothelin-Mediated Cardiorenal Hemodynamic and Neuroendocrine Effects Are Attenuated by Nitroglycerin in Vivo**  
*Wayne L. Miller, Patricia G. Caverio, Larry L. Aarhus, Denise M. Heublein, and John C. Burnett, Jr.*
- 164 **Assessment of Left Ventricular Hypertrophy in Patients With Essential Hypertension: A Rational Basis for the Electrocardiogram**  
*Pietro V. Fragola, Furio Colivicchi, Emanuele Fabrizi, Mauro Borzi, and Dario Cannata*

---

**BRIEF COMMUNICATION**

- 170 **Proliferation and Na<sup>+</sup>/H<sup>+</sup> Antiport Activity in Human Fibroblasts From Type I Diabetic Patients With Nephropathy**  
*Karen Soussan, Eric Dausse, Thierry Hannedouche, José Timsit, Florence Lemoult, Christian Boitard, Jean-Pierre Grünfeld, and Pascale Guicheney*

---

EDITORIAL

- 174 **Beyond Diagnosis of Left Ventricular Hypertrophy in Patients With Essential Hypertension**

*L. Michael Prisant and Albert A. Carr*

- 177 **ERRATUM**

## NUMBER 3, PART 1, MARCH 1993

---

ORIGINAL CONTRIBUTIONS

- 179 **A Comparison of Two Tests for the Assessment of Blood Pressure Responses to Sodium**

*Myron H. Weinberger, Jane E. Stegner, and Naomi S. Fineberg*

- 185 **Nephrosclerosis in Three Cohorts of Black and White Men Born 1925 to 1944, 1934 to 1953, and 1943 to 1962**

*Richard E. Tracy, Miguel A. Guzman, Margaret C. Oalman, William P. Newman, III, and Jack P. Strong*

- 193 **Verapamil Prevents the Acute Hypertensive Response to Intracerebroventricular Cadmium in Conscious Normotensive Rats**

*Paolo Madeddu, Maria Piera Demontis, Maria Vittoria Varoni, Maria Caterina Fattaccio, Alessandra Palmieri, and Vittorio Anania*

- 198 **Evaluation of Orthostatic Hypotension Using Power Spectral Analysis**

*Atsushi Moriguchi, Atsuhiko Otsuka, Katsuhiko Kohara, Hiroshi Mikami, and Toshio Ogihara*

- 204 **Effect of Antihypertensive Treatment on Daytime and Nighttime Power Spectral Analysis of Heart Rate**

*Damiano Rizzoni, Maria Lorenza Muiesan, Roberto Zulli, Maurizio Castellano, Giorgio Bettoni, Enzo Porteri, and Enrico Agabiti-Rosei*

- 209 **Determinants of Platelet Intracellular Free Calcium in Essential Hypertension and Effect of Stimulation by Arginine Vasopressin**

*Michelle A. Miller, Giuseppe A. Sagnella, Nirmala D. Markandu, and Graham A. MacGregor*

- 217 **Increased Inositol 1,4,5-Trisphosphate Binding Capacity in Vascular Smooth Muscle of Spontaneously Hypertensive Rats**

*Sylvie Bernier and Gaëtan Guillemette*

- 226 **Environmental Determinants of Urinary Kallikrein Excretion**

*Steven C. Hunt, Lily L. Wu, Martha L. Slattery, A. Wayne Meikle, and Roger R. Williams*

- 234 **Chronic Parathyroid Hormone Administration Reverses the Antihypertensive Effect of Calcium Loading in Young Spontaneously Hypertensive Rats**

*Hiroshi Kishimoto, Kei Tsumura, Shoji Fujioka, Sadahiko Uchimoto, and Hirotsushi Morii*

- 241 **Involvement of Nitric Oxide in the Blastogenic Response Deficiency in Splenocytes From Spontaneously Hypertensive Rats**  
*Jin Xiao, Yaoying Zeng, and Peter K.T. Pang*

---

BRIEF COMMUNICATION

- 248 **A New Approach for Evaluating Circadian Blood Pressure Levels and Variability From 24 h Ambulatory Blood Pressure Profiles**  
*Thomas Machnig, Günter Engels, Siegfried Schöbel, Jürgen Gellert, and Kurt Bachmann*

## NUMBER 3, PART 2, MARCH 1993

- 1S **Introduction**  
*José L. Rodicio*
- 2S **Short- and Long-Term Perspectives of Antihypertensive Therapy: An Introduction**  
*Alberto Zanchetti*
- 6S **A Review of the Short-Term Benefits of Antihypertensive Treatment With Emphasis on Stroke**  
*Austin E. Doyle*
- 9S **Clinical Value of Ambulatory Blood Pressure Monitoring**  
*G. Mancia, S. Omboni, G. Parati, C. Santucci, S. Trazzi, and L. Ulian*
- 14S **Left Ventricular Function and Regression of Left Ventricular Hypertrophy in Essential Hypertension**  
*D.L. Clement, M. De Buyzere, and D. Duprez*
- 20S **Hemodynamic Changes in Elderly Hypertensive Patients**  
*Michel E. Safar*
- 24S **Calcium Antagonists and Atherosclerosis: The Multicenter Isradipine/Diuretic Atherosclerosis Study**  
*C.D. Furberg, N.O. Borhani, R.P. Byington, M.E. Gibbons, and J.R. Sowers*
- 30S **Differential Effects of Antihypertensive Agents in Experimental and Human Atherosclerosis**  
*N. Omoigui and V.J. Dzau*
- 40S **Future Goals for the Treatment of Hypertension in the Elderly With Reference to STOP-Hypertension, SHEP, and the MRC Trial in Older Adults**  
*Lennart Hansson*
- 44S **A Multicenter Comparison of Isradipine and Felodipine in the Treatment of Mild-to-Moderate Hypertension**  
*S.A. Cutler and J.J. Hammond, for the Physician's Study Group*
- 49S **Isradipine in the Treatment of Mild-to-Moderate Hypertension: The Austrian Multicenter Isradipine cum Spirapril Study (AMICUS)**  
*Dieter Magometschnigg, on behalf of the AMICUS Study Group*



- 54S **Efficacy, Safety, and Tolerability of Isradipine in Hypertension as Used in General Practice in a Developing Country (Pakistan)**  
*A. Samad, A.H. Khan, and M.S. Hashmi*
- 57S **A Multicenter, Double-Blind, Randomized, Placebo-Controlled Study of Isradipine and Methyldopa as Monotherapy or in Combination With Captopril in the Treatment of Hypertension**  
*Y. Yodfat and N. Cristal, on behalf of the LOMIR®-MCT-IL Research Group*
- 62S **Reexamining the Quality of Life of Hypertensive Patients: A New Self-Structured Measure**  
*D. Bar-On and M. Amir*
- 67S **Antihypertensive Effect of Isradipine on Ambulatory and Casual Blood Pressure**  
*P. Fitscha and W. Meisner*
- 70S **Bioequivalence of a Slow-Release and a Non-Retard Formulation of Isradipine**  
*D.G. Holmes and K. Kutz*
- 74S **Isradipine: A Slow-Release Formulation Given Once Daily Controls Blood Pressure for 24 H**  
*David G. Holmes*
- 77S **Efficacy of Slow-Release Oral Isradipine in Moderate-to-Severe Hypertension With Add-On Spirapril**  
*R.F. Abarquez, Jr., R.G. Sy, and R.R. Castillo*
- 80S **A Comparative Study of Isradipine SRO and Enalapril in Black Patients With Mild-to-Moderate Hypertension**  
*B. Maharaj and K. van der Byl*
- 82S **Regression of Left Ventricular Hypertrophy With Isradipine Antihypertensive Therapy**  
*G.P. Vyssoulis, E.A. Karpanou, C.E. Pitsavos, D.K. Soulas, and P.K. Toutouzas*
- 86S **Regression of Left Ventricular Hypertrophy With Isradipine in Previously Untreated Hypertensive Patients**  
*A.J. Manolis, G. Kolovou, S. Handanis, G. Athanasopoulos, S. Antonopoulos, and D.V. Cokkinos*
- 89S **Reversal of Left Ventricular Hypertrophy With Isradipine Induces Diminution of Cardiac Arrhythmias**  
*M.A. Saragoça, J.L. Cassiolatto, A.M. Vanetta, M.E. Canziani, P. Abreu, R.T. Ventura, and O.L. Ramos*
- 92S **Effect of Short-Term Antihypertensive Therapy on Left Ventricular Wall Tension: A Double-Blind Comparison of Isradipine and Nifedipine**  
*R. Griebenow, R. Müller, H.M. Steffen, K.J. Burger, and D. Welzel*
- 95S **Beneficial Effect of Isradipine on the Development of Left Ventricular Hypertrophy in Mild Hypertension**  
*J. Mehlsen, G. Gleerup, C. Haedersdal, and K. Winther*

- 98S **Treatment of Hypertension With Calcium Antagonists and Aspirin: Effects on 24-H Platelet Activity**  
*N. Fetkowska, Z. Jakubovska, J. Oravcova, P. Tison, Jr., L. Ulicna, and T. Trnovec*
- 102S **Effects of Isradipine and Nifedipine Retard in Hypertensive Patients With Type II Diabetes Mellitus**  
*R. Gomis, J. Vidal, A. Novials, and M.J. Coves*
- 104S **Antihypertensive Efficacy, Safety, and Tolerability of Isradipine in Hypertensive Patients With Diabetes**  
*J.M.B. Parreira, L. Gardete Correia, E. Pereira, R.S. Duarte, and E. Pape*
- 107S **Antihypertensive Effect of the Calcium Antagonist Isradipine and Lipid Profile**  
*C. Farsang, I. Kiss, J. Kapocsi, E. Török, and E. Maklári*
- 110S **Transplacental Passage of Isradipine in the Treatment of Pregnancy-Induced Hypertension**  
*N.-O. Lunell, U. Bondesson, C. Grunewald, I. Ingemarsson, H. Nisell, and D. Wide-Svensson*
- 112S **Parenteral Isradipine Reduces Blood Pressure in Hypertensive Crisis**  
*M.A. Saragoça, R.A. Mulinari, A.F. Oliveira, J. Portela, F.L. Plavnik, D. Melegari, and O.L. Ramos*
- 115S **Concluding Remarks**  
*Ciuseppe Mancia*

## NUMBER 4, APRIL 1993

xi **ASH PROGRAM**

---

### ORIGINAL CONTRIBUTIONS

- 253 **Cicaprost, a Prostacyclin Analog, Protects Renal Function in Uninephrectomized Dogs in the Absence of Changes in Blood Pressure**  
*Eduardo Villa, Javier Martinez, Luis M. Ruilope, Francisco Mampaso, Jose M. Sancho, and Rafael G. Robles*
- 258 **Regulation of the Human Atrial Natriuretic Peptide Gene in Atrial Cardiocytes by the Transcription Factor AP-1**  
*Branka Kovacic-Milivojevic and David G. Gardner*
- 264 **Independent Effects of Hyperinsulinemia and Hyperglycemia on Intracellular Sodium in Normal Human Red Cells**  
*Mario Barbagallo, Raj K Gupta, and Lawrence M. Resnick*
- 268 **Divergent Effects of Acute and Chronic Ethanol Exposure on Contraction and Ca<sup>2+</sup> Mobilization in Cultured Vascular Smooth Muscle Cells**  
*Verena A. Briner, Phoebe Tsai, Xiaonan Wang, and Robert W. Schrier*



- 276 Ocreotide, a Somatostatin Analog, Reduces Insulin Secretion and Increases Renal Na<sup>+</sup> Excretion in Lean Essential Hypertensive Patients**  
*Claudio Ferri, Giancarlo De Mattia, Cesare Bellini, Oriana Laurenti, Cristina Bravi, Roberta Baldoncini, Maria S. Bonavita, Anna Santucci, and Francesco Balsano*
- 282 Left Ventricular Mass and Geometry in Patients With Established Hypertension and White Coat Hypertension**  
*Asbjørn Høegholm, Kjeld S. Kristensen, Lia E. Bang, Jakob W. Nielsen, Walter B. Nielsen, and N. Henrik Madsen*
- 287 Hydrocortisone-Induced Hypertension in Men: The Role of Cardiac Output**  
*Marinis Pirpiris, Stella Yeung, Elizabeth Dewar, Garry L. Jennings, and Judith A. Whitworth*
- 295 Effects of Canrenoate on Red Cell Sodium Transport and Calf Flow in Essential Hypertension**  
*Andrea Semplicini, Federico Buzzaccarini, Giulio Ceolotto, Mauro Marzola, Maria Grazia Mozzato, Marta Giusto, Maria Campagnolo, Cinzia Simonella, and Achille C. Pessina*
- 302 Postpartum Abnormalities of Carbohydrate and Cellular Calcium Metabolism in Pregnancy Induced Hypertension**  
*James R. Sowers, Paul R. Standley, Scott Jacober, Tushar Niyogi, and Lori Simpson*
- 308 Prevalence of Ectopic Ventricular Activity After Left Ventricular Mass Regression**  
*Robert A. González-Fernández, Mercedes Rivera, Pedro J. Rodríguez, José Fernández-Martínez, Luis H. Soltero, Luis M. Díaz, and Jorge E. Lugo, with the technical assistance of Cinthya Vargas and Ileana Torres*

---

#### BRIEF COMMUNICATIONS

- 314 Red Blood Cell Na-Li Countertransport, Hypertensive Heredity, and Cardiovascular Risk in Young Adults**  
*J.-M. Krzesinski, A. Saint-Remy, F. Du, and G. Rorive*
- 317 Hypertension Secondary to Chlorpropamide With Amelioration by Changing to Insulin**  
*James K. Schmitt and Jewel R. Moore*
- 320 Serum Lipid Changes on Low Salt Diet: Effects of  $\alpha_1$ -Adrenergic Blockade**  
*Danilo Fliser, Rainer Nowack, Nicole Allendorf-Ostwald, Brigitte Kohl, Achim Hübinger, and Eberhard Ritz*
- 325 Cadmium-Induced Arteriolar Constriction in Skeletal Muscle Microcirculation**  
*C. Zhang, G.S. Thind, I.G. Joshua, and J.T. Fleming*
- 330 S<sub>A</sub> Gene and Blood Pressure Cosegregation Using Dahl Salt-Sensitive Rats**  
*Eugenie L. Harris, Howard Dene, and John P. Rapp*

---

#### EDITORIAL

- 335 Hypertension, Left Ventricular Hypertrophy, Ventricular Ectopy, and Sudden Death**  
*Franz H. Messerli*

---

SUPPLEMENT

---

## SYMPOSIUM

**THE KIDNEYS, DIABETES MELLITUS AND HYPERTENSIVE DISEASE :  
PATHOPHYSIOLOGY AND THERAPEUTIC IMPLICATIONS**

- 117S Symposium Introduction: Aberrant Prorenin-Renin System Behavior in Diabetes**  
*John H. Laragh*
- 119S Hypertension and the Kidney**  
*Henry T. Smith*
- 123S Ionic Basis of Hypertension, Insulin Resistance, Vascular Disease, and Related Disorders: The Mechanism of "Syndrome X"**  
*Lawrence M. Resnick*
- 135S Pathophysiology of Renal and Vascular Disorders in Insulin-Dependent Diabetes**  
*GianCarlo Viberti*
- 140S Hypertension in Diabetic Patients: An Overview of Interventional Studies to Preserve Renal Function**  
*George L. Bakris*
- 148S Comparative Renal Hemodynamic Effects of Lisinopril, Verapamil, and Amlodipine in Patients With Chronic Renal Failure**  
*Phyllis August, Tomas Lenz, and John H. Laragh*
- 155S Closing Remarks**  
*Louis Tobian*

## NUMBER 5, PART 1, MAY 1993

---

ORIGINAL CONTRIBUTIONS

---

- 337 Long-Term Effects of the Angiotensin Converting Enzyme Inhibitor Captopril on Metabolic Control in Non-Insulin-Dependent Diabetes Mellitus**  
*Jawad Alkharouf, Kyanam Nalinikumari, Dalila Corry, and Michael Tuck*
- 344 A Kallikrein-Like Enzyme in Human Vascular Tissue**  
*Paolo Madeddu, Tiziano Gherli, Pier Paolo Bacciu, Mario Maioli, and Nicola Glorioso*
- 349 Effects of an Orally Active Renin Inhibitor, Ro 42-5892, in Patients With Essential Hypertension**  
*Isaac Kobrin, Reuven J. Viskoper, Aneta Laszt, Jürgen Bock, Cornelia Weber, and Vincent Charlon*
- 357 Atrial Natriuretic Factor Potentiating and Hemodynamic Effects of SCH 42495, a New, Neutral Metalloendopeptidase Inhibitor**  
*R.W. Watkins, S. Vemulapalli, P.J.S. Chiu, C. Foster, E.M. Smith, B. Neustadt, M. Haslanger, and E.J. Sybertz*

- 369 Contrasting Effects of Epinephrine on Forearm Hemodynamics and Arterial Plasma Norepinephrine**  
*Sverre E. Kjeldsen, Jurij Petrin, Alan B. Weder, and Stevo Julius*
- 376 Positive Correlation Between the Blood Pressure and Heart Rate Response to the Cold Pressor Test and the Environmental Temperature in Older Hypertensives**  
*Teodor Postolache, Sylvie Gautier, Brigitte Laloux, Michel Safar, and Athanase Benetos*
- 382 Hypertension and a Tumor of the Glomus Jugulare Region: Evidence for Epinephrine Biosynthesis**  
*Jon Blumenfeld, Noel Cohen, Muhammad Anwar, Gladys Teitelman, John H. Laragh, and David A. Ruggiero*
- 388 On the Vascular Inotropic Action of 1,25-(OH)<sub>2</sub> Vitamin D<sub>3</sub>**  
*Richard D. Bukoski and Hong Xue*
- 397 Role of Digitalis-Like Substance in the Hypertension of Streptozotocin-Induced Diabetes in Reduced Renal Mass Rats**  
*Shanwan Chen, Christina Yuan, David Clough, James Schooley, Francis J. Haddy, and Motilal B. Pamnani*
- 407 Do Thymic-Neuroendocrine Interactions Play a Role in the Antihypertensive Effect of Neonatal Thymectomy in Lyon Hypertensive Rats?**  
*Alain Bataillard, Joëlle Sacquet, Claude Julien, Madeleine Vincent, Celso Gomez-Sanchez, Jean-Louis Touraine, and Jean Sassard*
- 413 Ionic Basis of Hypertension in Diabetes Mellitus: Role of Hyperglycemia**  
*Lawrence M. Resnick, Mario Barbagallo, Raj K. Gupta, and John H. Laragh*

#### BRIEF COMMUNICATIONS

- 418 Increased Prevalence of Cardiovascular Complications in Women With Furosemide Resistant Essential Hypertension**  
*Gunnar H. Anderson, Jr., Nancy Newman-Palmer, Nancy Blakeman, and David H.P. Streeten*
- 422 Impact of Diabetes on Sodium-Lithium Countertransport in Pregnancy-Induced Hypertension**  
*Ellen W. Seely, Mitzy L. Canessa, and Steven W. Graves*
- 427 Increased Concentration of Endothelin Messenger RNA in the Mesenteric Arteries of Cyclosporine-Induced Hypertensive Rats**  
*Yoshiyu Takeda, Isamu Miyamori, Takashi Yoneda, and Ryoyu Takeda*
- 431 Decreased Atrial Natriuretic Peptide Receptors in the Adrenal Gland of Genetically Hypertensive Rats**  
*Chandra K. Mittal*

#### REVIEW

- 434 Calcitonin Gene-Related Peptide and Regulation of Human Cardiovascular Homeostasis**  
*Jacek J. Preibisz*

- 451 ERRATUM**

## NUMBER 5, PART 2, MAY 1993

## ASH VIII—PROGRAM

## ORAL PRESENTATIONS

- 1A Session A
- 3A Session B
- 5A Session C
- 7A Session D
- 9A Session E
- 11A Session F
- 13A Session G
- 15A Session H
- 17A Session I
- 19A Session J
- 21A Session K
- 23A Session L

## POSTERS

- 25A Cardiology/Circulation
- 39A Vascular Structural Alterations in Hypertension
- 46A Nephrology
- 52A Endocrinology/Metabolism
- 64A Membrane Transport/Cell Biology/Molecular Biology
- 71A Neurotransmitters/Local Hormones/ Endothelium
- 79A Pathogenetic Mechanisms of Hypertension
- 86A Epidemiology/Prevention
- 91A Pharmacology/Therapeutics
- 111A Clinical Hypertension

- 138A AUTHOR INDEX

## NUMBER 6, PART 1, JUNE 1993

## ORIGINAL CONTRIBUTIONS

- 453 Regulation of the Urinary Excretion of Endothelin in the Rat  
*Zaid A. Abassi, Henry Klein, Eliyahu Golomb, and Harry R. Keiser*
- 458 Abnormalities in Dihomo- $\gamma$ -linolenic Acid Release in the Pathogenesis of Hypertension  
*Jacob Phillip Mtabaji, Mehar Singh Manku, and David Frederick Horrobin*
- 463 Possible Radical Scavenging Properties of Cicletanine and Renal Protection in Dahl Salt Sensitive Rats  
*Yoshio Uehara, Yukari Kawabata, Nobuhito Hirawa, Satoru Takada, Taiji Nagata, Atsushi Numabe, Junichi Iwai, and Tsuneaki Sugimoto*
- 473 Effects of Neurotensin on Norepinephrine Release in Blood Vessels of Spontaneously Hypertensive Rats  
*Kazushi Tsuda and Yoshiaki Masuyama*

- 480 **Blood Pressure Variability and Urinary Electrolyte Excretion in Normotensive Adults**  
*Michael C. Ruddy, Anjali Arora, Edmond S. Malka, and Grace B. Bialy*
- 487 **Myocardial Fibrosis in the Rat With Mineralocorticoid Excess: Prevention of Scarring by Amiloride**  
*Scott E. Campbell, Joseph S. Janicki, Beatriz B. Matsubara, and Karl T. Weber*
- 496 **Synergistic Action of Angiotensin II, Insulin-Like Growth Factor-I, and Transforming Growth Factor- $\beta$  on Platelet-Derived Growth Factor-BB, Basic Fibroblastic Growth Factor, and Epidermal Growth Factor-Induced DNA Synthesis in Vascular Smooth Muscle Cells**  
*Yon Ko, Heike Stiebler, George Nickenig, Andreas J. Wiczorek, Hans Vetter, and Agapios Sachinidis*
- 500 **Impaired Recovery of Vascular Smooth Muscle Intracellular Calcium Following Agonist Stimulation in Insulin Resistant (Zucker Obese) Rats**  
*Margaret A. Abel and Michael B. Zemel*
- 505 **Determinants of Left Ventricular Mass in Normotensive Children**  
*Frank A. Tieber, Frances McCaffrey, Kurt Pflieger, R. Austin Raunika, William B. Strong, and Harry Davis*
- 514 **Effects of Renin Inhibitor A-72517 on Hemodynamics and Cardiac Function in Sodium-Depleted Dogs**  
*Jerry L. Wessale, Hollis D. Kleinert, Samuel V. Calzadilla, Peter J. Kovar, and Saul H. Rosenberg*
- 522 **Calcium Metabolism, Plasma Parathyroid Hormone, and Calcitriol in Transient Hypertension of Pregnancy**  
*J.D. Lalau, I. Jans, N. El Esper, R. Bouillon, and A. Fournier*
- 528 **Potassium Channel Antagonists and Vascular Reactivity in Stroke-Prone Spontaneously Hypertensive Rats**  
*Theodore J. Koliass, Siangshu Chai, and R. Clinton Webb*

---

BRIEF COMMUNICATIONS

- 534 **Erythrocyte  $\text{Na}^+/\text{Li}^+$  Countertransport and Glomerular Hyperfiltration in Insulin-Dependent Diabetics**  
*Rossella Rota, José Timsit, Thierry Hannedouche, Aschour Ikeni, Christian Boitard, and Pascale Guichenev*
- 538 **Differential Regulation of ANF-R2 Receptors Coupled to Adenylyl Cyclase in Cardiovascular Tissues in Hypertension**  
*Madhu B. Anand-Srivastava*
- 542 **Ionized Magnesium and Calcium Levels in Umbilical Cord Serum of Pregnant Women With Transient Hypertension During Labor**  
*Sara M. Handwerker, Bella T. Altura, Blas Royo, and Burton M. Altura*

---

546 ERRATUM

## NUMBER 6, PART 2, JUNE 1993

- 159S Introduction to the Third International Meeting on Ambulatory Blood Pressure Monitoring**  
*Thomas G. Pickering*

- 161S Ambulatory Blood Pressure: A Personal Historical Account**  
*Maurice Sokolow*

---

DIURNAL RHYTHMS AND BLOOD PRESSURE VARIABILITY

- 166S Determinants and Consequences of the Diurnal Rhythm of Blood Pressure**  
*Thomas G. Pickering and Gary D. James*
- 170S The Influence of Behavioral Factors on the Daily Variation of Blood Pressure**  
*Gary D. James and Thomas G. Pickering*
- 174S Can Simultaneous Ambulatory Blood Pressure and Activity Monitoring Improve the Definition of Blood Pressure?**  
*Michael J. Stewart, Helen Brown, and Paul L. Padfield*
- 179S Age-Specific Characteristics of Nocturnal Blood Pressure in a General Population in a Community of Northern Japan**  
*Yutaka Imai, Masanori Munakata, Junichiro Hashimoto, Naoyoshi Minami, Hiromichi Sakuma, Noriko Watanabe, Tamami Yabe, Akimitsu Nishiyama, Mariko Sakuma, Toshio Yamagishi, and Keishi Abe*

---

METHODS OF ANALYSIS

- 184S Fourier Analysis of Blood Pressure Profiles**  
*Jan S. Staessen, Robert Fagard, Lutgarde Thijs, and Antoon Amery*
- 188S Spectral Analysis of 24 h Blood Pressure Recordings**  
*Gianfranco Parati, Marco di Rienzo, Stefano Omboni, Paolo Castiglioni, Alessandra Frattola, and Giuseppe Mancia*
- 194S The Clinical Utility of Blood Pressure Load in Hypertension**  
*Prince K. Zachariah and William E. Sumner III*
- 198S Analysis of Blood Pressure Variability**  
*Margaret C. Wu*

---

DEFINING NORMAL AMBULATORY PRESSURE

- 201S Defining Normal Ambulatory Blood Pressure**  
*Eoin O'Brien, Neil Atkins, and Kevin O'Malley*
- 207S Defining Normal Ambulatory Blood Pressure in Relation to Target-Organ Damage and Prognosis**  
*Paolo Verdecchia and Carlo Porcellati*
- 211S What Is Normal Blood Pressure? Comparison of Ambulatory Pressure Level and Variability in Patients With Normal or Abnormal Left Ventricular Geometry**  
*Richard B. Devereux, Gary D. James, and Thomas G. Pickering*



---

CLINICAL APPLICATIONS AND COST EFFECTIVENESS

- 216S Ambulatory Blood Pressure Monitoring: Can a Clinical Role Be Defined?**  
*William B. Stason and Lawrence J. Appel*

- 220S Ambulatory Blood Pressure Monitoring Can Improve Cost-Effective Management of Hypertension**  
*Lawrence R. Krakoff*

- 225S Clinical Usefulness of Ambulatory Blood Pressure Monitoring**  
*William B. White, Jennifer M. Grinn, and Ellen J. McCabe*

---

APPLICATIONS IN CLINICAL TRIALS

- 229S Reproducibility of Ambulatory Blood Pressure and Assessing Treatment Withdrawal in Hypertension Trial**  
*Richard A. Reeves and Martin Myers*

- 233S Ambulatory Blood Pressure Monitoring in the Design of Studies on Antihypertensive Drug Efficacy**  
*Giuseppe Mancia, Stefano Omboni, Gianfranco Parati, Roberto Sega, and Silvia Trazzi*

- 236S Ambulatory Blood Pressure Monitoring: Critique on Clinical Issues and Clinical Trials**  
*Martin G. Myer*

## NUMBER 7, PART 1, JULY 1993

---

ORIGINAL CONTRIBUTIONS

- 547 Reversal of Diastolic Dysfunction in Borderline Hypertension by Long-Term Medical Treatment: Longitudinal Evaluation by Pulsed Doppler Echocardiography**

*Gaston Kakota Kapuku, Shinji Seto, Hideki Mori, Mitsuhiro Mori, Toshinori Utsunomia, Shin Suzuki, Yasuhiko Oku, and Katsusuke Yano*

- 554 Effects of Long-Term Antihypertensive Treatment and Aging on Renal Function and Albumin Excretion in Primary Hypertension**

*Susanne Ljungman, John Wikstrand, Marianne Hartford, Mattias Aurell, Göran Lindstedt, and Göran Berglund*

- 564 Association of Fasting Insulin With Longitudinal Changes in Blood Pressure in Children and Adolescents: The Bogalusa Heart Study**

*Xiaozhang Jiang, Sathanur R. Srinivasan, Weihang Bao, and Gerald S. Berenson*

- 570 Effects of Enalaprilat on Hemodynamics and Ventricular Activation Duration in Hypertensive Patients With Left Ventricular Hypertrophy: Clinical Evidence of Improved Excitation-Contraction Coupling With Angiotensin Converting Enzyme Inhibition in Human Hypertension**

*Robert A. González-Fernández, Pablo I. Altieri, Raúl Jiménez, José Lastra, José R. Meléndez, José A. Martínez-Toro, and Héctor L. Banchs*

- 579 **The Influence of Dietary Salt and Plasma Renin Activity on Myosin Heavy Chain Gene Expression in Rat Hearts**  
*Peter Buttrick, Matthew Kaplan, Maria J.F. Camargo, Giovanni deSimone, John H. Laragh, Donald Wallerson, and Richard B. Devereux*
- 586 **Antihypertensive Medication-Taking: Investigation of Simple Regimen**  
*David Guerrero, Peter Rudd, Colleen Bryant-Kosling, and Blackford F. Middleton*
- 593 **Increased Brush-Border Membrane Calcium Transport in the Intestine, but not the Kidney Tubule, of Spontaneously Hypertensive Rats**  
*Uta Hennessen, Sophie Chabanis, Sonia Leite Silva, Bernadette Nabarra, Tilman Drüeke, and Bernard Lacour*
- 602 **Enhanced Production of Nitric Oxide in Aortae From Spontaneously Hypertensive Rats by Interleukin-1 $\beta$**   
*Didier C. Junquero, Valérie B. Schini, Timothy Scott-Burden, and Paul M. Vanhoutte*
- 611 **Characteristics of Endothelin Receptors and Intracellular Signalling in Porcine Inner Medullary Collecting Duct Cells**  
*Iris Migas, Angela Bäcker, Harald Meyer-Lehnert, Harald Michel, Uwe Wulfshel, and Herbert J. Kramer*
- 619 **In Vivo Pharmacology of SC-51316, a Nonpeptidic Angiotensin II Receptor Antagonist**  
*Gillian M. Olins, Glenn J. Smits, John P. Koepke, Horng-Chih Huang, David B. Reitz, Robert E. Manning, and Edward H. Blaine*

## BRIEF COMMUNICATIONS

- 626 **Regulation of Na<sup>+</sup>,K<sup>+</sup>-ATPase Gene Expression by Insulin in Vascular Smooth Muscle Cells**  
*Prakash R. Tirupattur, Jeffrey L. Ram, Paul R. Standley, and James R. Sowers*
- 630 **Responsiveness to  $\alpha$ - and  $\beta$ -Adrenergic Receptor Agonists: Effects of Race in Borderline Hypertensive Compared to Normotensive Men**  
*Andrew Sherwood and Alan L. Hinderliter*
- 636 **Chlorthalidone Attenuates the Reduction in Total Cholesterol and Small, Dense LDL Cholesterol Subclass Associated With Weight Loss**  
*Kent Bradley, John M. Flack, John Belcher, Patricia Elmer, Peggy Miller, and Richard Grimm, Jr.*

## NUMBER 7, PART 2, JULY 1993

- 239S **Introduction**  
*Murray Epstein*
- 241S **Pathophysiology of Hypertensive Renal Damage**  
*Eberhard Ritz, Danilo Fliser, and Michael Siebels*
- 245S **Renal Issues in the Management of Hypertension**  
*W. Dallas Hall*

- 251S Calcium Antagonists and the Kidney: Implications for Renal Protection**  
*Murray Epstein*
- 260S Hyperinsulinemia, Insulin Resistance, and Hyperglycemia: Contributing Factors in the Pathogenesis of Hypertension and Atherosclerosis**  
*James R. Sowers, Paul R. Standley, Jeffrey L. Ram, Scott Jacober, Lori Simpson, and Kelly Rose*
- 271S Correction of Left Ventricular Ischemia in Blacks With Hypertensive Heart Disease**  
*Albert A. Carr, L. Michael Prisant, and Jan L. Houghton*
- 277S Managing the Older Patient With Hypertension**  
*William B. Applegate*
- 283S Endothelial Regulation of Vascular Tone and Growth**  
*Thomas F. Lüscher and Felix C. Tanner*
- 294S Cardiac Effects of Isradipine in Patients With Hypertension**  
*Per Lund-Johansen*

## NUMBER 8, AUGUST 1993

### ORIGINAL CONTRIBUTIONS

- 641 Aging and Human Hormonal and Pressor Responsiveness to Angiotensin II Infusion With Simultaneous Measurement of Exogenous and Endogenous Angiotensin II**  
*Joseph Duggan, Juerg Nussberger, S. Kilfeather, and K. O'Malley*
- 648 Response of Ambulatory Blood Pressure to Antihypertensive Therapy Guided by Clinic Pressure**  
*Robert Fagard, Edith Bielen, Jan Staessen, Lutgarde Thijs, and Antoon Amery*
- 654 Ambulatory Blood Pressure Changes in the Menstrual Cycle of Hypertensive Women: Significance of Plasma Renin Activity Values**  
*Eva A. Karpanou, Gregory P. Vyssoulis, Dorita G. Georgoudi, Marina G. Toutouza, and Pavlos K. Toutouzas*
- 660 Effect of Cytokines on Cytosolic-free Calcium in Human Platelets From Essential Hypertensives**  
*Martin Tepel, Hubert Wischniowski, Marcus Neusser, Claus Spieker, and Walter Zidek*
- 667 Effect of Phosphoramidon (Endothelin Converting Enzyme Inhibitor) and BQ-123 (Endothelin Receptor Subtype A Antagonist) on Blood Pressure in Hypertensive Rats**  
*Ellen G. McMahon, Maria A. Palomo, Melanie A. Brown, Stephen R. Bertenshaw, and Jeffrey S. Carter*
- 674 Opposite Effects of Cell Growth Factors and Cicletanine Sulfate on the Sodium-Independent  $[Cl^-/HCO_3^-]$  Exchange in Cultured Vascular Smooth Muscle**  
*Karine Fanous, Corinne Nazaret, Nathalie Senn, Elisabeth Decoopman-Morin, Michel Allard, and Ricardo P. Garay*

- 680 **Predominance of High Molecular Weight Plasma  $\text{Na}^+\text{-K}^+\text{-ATPase}$  Inhibitor in Essential Hypertension**  
*Harvey C. Gonick, Elmar W.J. Weiler, Farhad Khalil-Manesh, and Michael A. Weber*
- 688 **Effect and Tolerability of Combining Lovastatin With Nifedipine or Lisinopril**  
*Ingrid Os, Bjorn Bratland, Björn Dahlöf, Kjell Gisholt, Jan-Otto Syvertsen, and Steinar Tretli*
- 693 **Racial Differences in Cell Membrane ATPases and Cellular Cation Content in Urban South African Normotensive and Hypertensive Subjects**  
*Rhian M. Touyz, Frank J. Milne, and Stefan G. Reinach*
- 701 **Mechanisms of Ozolinone-Induced Renin Release and Diuresis**  
*Julio E. Benabe, José Pedraza-Chaverri, and Manuel Martínez-Maldonado*
- 708 **Determinants of Left Ventricular Function Before and After Regression of Myocardial Hypertrophy in Hypertension**  
*A.M. Grandi, A. Venco, F. Sessa, A. Gola, P. Pantaleo, G. Gobbi, R. Baiardini, and G. Finardi*
- 713 **Borderline Hypertension: A 24-Hour Abnormality**  
*Anders Bergbrant, Lennart Hansson, and Sverker Jern*

---

**BRIEF COMMUNICATION**

- 719 **Chronic Ethanol Treatment Increases the Circulating Plasma Levels of B-Type Natriuretic Peptide (BNP-45) in the Rat**  
*D.A. Wagle, S.C. Pang, J.D. Watson, I.R. Sarda, N.N. Radakovic, and T.G. Flynn*

## NUMBER 9, SEPTEMBER 1993

---

**ORIGINAL CONTRIBUTIONS**

- 723 **Lead-Induced Hypertension: Possible Role of Endothelial Factors**  
*Farhad Khalil-Manesh, Harvey C. Gonick, Elmar W.J. Weiler, Bruce Prins, Michael A. Weber, and Ralph E. Purdy*
- 730 **Effect of Prostacyclin on Platelet Intracellular Free Calcium Concentration of Hypertensive and Normotensive Humans**  
*Hiroaki Komura, Richard D. Bukoski, Njeri Karanja, Cynthia D. Morris, Tetsuji Shingu, and David A. McCarron*
- 736 **Glucocorticoids Regulate  $\text{Na}^+$  Transport in Vascular Smooth Muscle Through the Glucocorticoid Receptor-Mediated Mechanism**  
*Ludwig Kornel, Brinda Manisundaram, and William A. Nelson*
- 745 **Ambulatory Blood Pressure Monitoring During Pregnancy: Comparison With Mercury Sphygmomanometry**  
*Mark A. Brown, Megan L. Buddle, Gregory M. Cario, and Judith A. Whitworth*

- 750 **Reduced Left Ventricular Distensibility in Normotensive Men With a Positive Family History of Hypertension**  
*Bengt R. Widgren, Bengt Persson, and John Wikstrand*
- 758 **The Occurrence of Parathyroid Hypertensive Factor (PHF) in Dahl Rats**  
*Richard Z. Lewanczuk and Peter K.T. Pang*
- 763 **Erythrocyte Cation Transport Systems and Membrane Lipids in Insulin-Dependent Diabetics**  
*P. Lijnen, A. Fenyvesi, M. Bex, R. Bouillon, and A. Amery*
- 771 **Increased Cytosolic Free Calcium in Red Blood Cells Is Associated With Essential Hypertension in Humans**  
*Armando Lindner, Thomas R. Hinds, Robert C. Davidson, and Frank F. Vincenzi*
- 780 **Effects of Sodium Salts on Plasma Renin Activity and Norepinephrine Response to Orthostasis in Salt-Sensitive Normotensive Subjects**  
*Arya M. Sharma, Ulrike Schorr, Wolfgang Oelkers, and Armin Distler*
- 786 **Relationships Between Ambulatory Blood Pressure, Forearm Vascular Resistance, and Left Ventricular Mass in Hypertensive and Normotensive Subjects**  
*Karl-Ludwig Schulte, Katharina Liederwald, Wolfgang Meyer-Sabellek, Doris van Gemmeren, Tomas Lenz, and Reinhard Gotzen*
- 794 **Contribution of Vasopressin to Orthostatic Blood Pressure Maintenance in Essential Hypertension**  
*Rogério B. de Paula, Frida L. Plavnik, Cibele I.S. Rodrigues, Francisco de A. Rocha Neves, Osvaldo Kohlmann, Jr., Artur B. Ribeiro, Irene Gavras, and Haralambos Gavras*
- 799 **The Blood Pressure Effects on Calcium Supplementation in Humans of Known Sodium Responsiveness**  
*Myron H. Weinberger, Urban L. Wagner, and Naomi S. Fineberg*

---

BRIEF COMMUNICATION

- 806 **Evidence that the Autonomic Nervous System Plays a Major Role in the L-NAME-Induced Hypertension in Conscious Rats**  
*Roberto S. Cunha, Antonio M. Cabral, and Elisardo C. Vasquez*

---

EDITORIAL

- 810 **On the Assertion That a Moderate Restriction of Sodium Intake May Have Adverse Health Effects**  
*Hugh E. de Wardener and Norman M. Kaplan*

## NUMBER 10, OCTOBER 1993

---

ORIGINAL CONTRIBUTIONS

- 815 **Comparison of Left Ventricular Mass and Geometry in Black and White Patients With Essential Hypertension**  
*Michael J. Koren, George A. Mensah, James Blake, John H. Laragh, and Richard B. Devereux*

- 824 **Hemodynamic Reactivity Factors to Cold Pressor Test in Blacks With Sustained Essential Hypertension**  
*J. Toto-Moukoko, J.P. Um, J.P. Jon, and P. Hagbe*
- 830 **Nature of Elevated Blood Pressure in Normoalbuminuric Type I Diabetic Patients: Essential Hypertension?**  
*Kirsten Nørgaard, Else Rasmussen, Tonny Jensen, Jørn Giese, and Bo Feldt-Rasmussen*
- 837 **Cardiovascular Effects of Long-Term Endothelin Infusion and Responses to Endothelin During ACTH Infusion in Conscious Sheep**  
*Clive N. May, Michael L. Mathai, John G. McDougall, and Judith A. Whitworth*
- 844 **Plasma Norepinephrine Changes After Arousal and Exercise Were Enhanced in Conscious Pigs With Perinephritic Hypertension**  
*Shuping Zhao, Judith M.B. Pinto, Dennis Bergau, Bernard Lown, and Debra A. Kirby*
- 851 **Altered Local Regulation of Blood Flow and Shear Rate in Renal Hypertension**  
*Donna H. Wang, Russell L. Prewitt, and Colleen K. Reilly*
- 857 **Increased Platelet Reactivity to Prostaglandin E<sub>1</sub> in Hypertension Is Linked With Altered Signal Transduction**  
*Huzoor-Akbar, Timothy Dean, and Robyn Kornhauser*
- 863 **Stimulation of Renal Interstitial Bradykinin by Sodium Depletion**  
*Helmy M. Siragy, Ayad A. Jaffa, and Harry S. Margolius*
- 867 **Rare Renal Transcription of the Atrial Natriuretic Factor Gene in Rats: Demonstration by Polymerase Chain Reaction**  
*Eliahu Golomb, Eitan Friedman, Zaid A. Abassi, Daniel Trachewsky, and Harry R. Keiser*
- 873 **Accuracy and Reproducibility of 30 Devices for Self-Measurement of Arterial Blood Pressure**  
*Jan van Egmond, Jacques W.M. Lenders, Erna Weernink, and Theo Thien*
- 880 **Ambulatory Monitoring of Blood Pressure in Normal Pregnancy**  
*Serge Contard, Xavier Chanudet, Damien Coisne, Pascal Battistella, Jean-François Marichal, Murielle Pitiot, Régis de Gaudemaris, and Jean Ribstein*

---

**BRIEF COMMUNICATIONS**

- 885 **HLA Antigens in Borderline and Essential Hypertension**  
*Yuri S. Titkov, Renate A. Ziskina, Alexander A. Temirov, David V. Gybladze, and Ludmila N. Bubnova*
- 888 **The Effect of Blood Pressure Cuff Inflation on Sleep: A Polysomnographic Examination**  
*Joel E. Dimsdale, Timothy V. Coy, Sonia Ancoli-Israel, Jack Clausen, and Charles C. Berry*
- 892 **Low-Dose Angiotensin II Increases Glucose Disposal Rate During Euglycemic Hyperinsulinemia**  
*Bengt R. Widgren, Vaidotas Urbanavicius, John Wikstrand, Stig Attvall, and Bengt Persson*



## REVIEW

- 896 **A Review of The Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure: The Fifth Report, 1993**  
*Michael H. Alderman*

## NUMBER 11, PART 1, NOVEMBER 1993

## ORIGINAL CONTRIBUTIONS

- 899 **The Usefulness of the Captopril Test as a Simultaneous Screening for Primary Aldosteronism and Renovascular Hypertension**  
*Taisuke Iwaoka, Teruhisa Umeda, Shojiro Naomi, Junnosuke Inoue, Masato Sasaki, Joji Yamauchi, and Tatsuo Sato*
- 907 **Left Ventricular Mass and Geometry Before and After Etiologic Treatment in Renovascular Hypertension, Aldosterone-Producing Adenoma, and Pheochromocytoma**  
*Thierry Denolle, Gilles Chatellier, Jacques Julien, Christiane Battaglia, Ping Luo, and Pierre-François Plouin*
- 914 **Renin, Angiotensinogen, and Kallikrein Gene Expression in Two-Kidney Goldblatt Hypertensive Rats**  
*Samir S. El-Dahr, Susana Dipp, Shangbo Guan, and L. Gabriel Navar*
- 920 **Effects of Magnesium and Nifedipine Infusions on Insulin Action, Substrate Oxidation, and Blood Pressure in Aged Hypertensive Patients**  
*Giuseppe Paolisso, Antonio Gambardella, Vinicio Balbi, Domenico Galzerano, Mario Verza, Michele Varricchio, and Felice D'Onofrio*
- 927 **Comparison of Nitrendipine and Cilazapril in Patients With Hypertension and Non-Insulin-Dependent Diabetes Mellitus**  
*Dario Giugliano, Nicoletta De Rosa, Raffaele Marfella, Giosué Di Maro, Federico Cacciapuoti, Antonio Quatraro, Rita Acampora, and Felice D'Onofrio*
- 933 **Augmentation of the Renal Tubular Dopaminergic Activity by Oral Calcium Supplementation in Patients With Essential Hypertension**  
*Yasunobu Dazai, Takeru Iwata, and Kunio Hiwada*
- 938 **Increased Platelet Cytosolic Calcium Responses to Low Density Lipoprotein in Type II Diabetes With and Without Hypertension**  
*Paul R. Standley, Safdar Ali, Chandra Bapna, and James R. Sowers*
- 944 **Effect of Long-Term Administration of 1,25 (OH)<sub>2</sub> Vitamin D<sub>3</sub> on Blood Pressure and Resistance Artery Contractility in the Spontaneously Hypertensive Rat**  
*Richard D. Bukoski, Junyi Li, and Jie Bo*
- 951 **Quinapril Prevents Stroke Both During and After the Treatment Period in Stroke-Prone Spontaneously Hypertensive Rats**  
*Elisabeth Vacher, Paul Fornes, Valérie Domergue, Christine Richer, Patrick Bruneval, and Jean-François Giudicelli*

**960 Chronic Pressure-Natriuresis Relationship in Dogs With Inherited Essential Hypertension**

*Paula E. Papanek, Kenneth C. Bovee, Meredith M. Skelton, and Allen W. Cowley, Jr.*

BRIEF COMMUNICATION

**968 Ambulatory Blood Pressure Patterns in Youth**

*Gregory A. Harshfield, Derrick A. Pulliam, Grant W. Somes, and Bruce S. Alpert*

SPECIAL ARTICLE

**974 International Roundtable Discussion of National Guidelines for the Detection, Evaluation, and Treatment of Hypertension**

*Michael H. Alderman, William C.ushman, Martha N. Hill, and Lawrence R. Krakoff, and Mark S. Pecker*

## NUMBER 11, PART 2, NOVEMBER 1993

**301S Introduction**

*G.R. Thompson and D.L. Clement*

**303S Hypertension and Hyperlipidemia: A Review**

*Hans Lithell*

**309S Coronary Artery Disease Prediction**

*Peter W.F. Wilson and Jane C. Evans*

**314S Cellular Mechanisms of Atherogenesis**

*Paul E. DiCorleto*

**319S Genetic Basis of Familial Dyslipidemia and Hypertension: 15-Year Results From Utah**

*R.R. Williams, S.C. Hunt, P.N. Hopkins, L.L. Wu, S.J. Hasstedt, T.D. Berry, G.K. Barlow, B.M. Stults, M.C. Schumacher, E.H. Ludwig, S.C. Elbein, D.E. Wilson, R.P. Lifton, and J.M. Lalouel*

**328S Inflammatory Mechanisms of Atheroma Formation: Influence of Fluid Mechanics and Lipid-Derived Inflammatory Mediators**

*Philip D. Henry and Chu-Huang Chen*

**335S Magnetic Resonance Imaging of Atherosclerotic Vascular Disease**

*S. Richard Underwood and Raad H. Mohiaddin*

**340S Efficacy and Safety of Fluvastatin in Hypertensive Patients: An Analysis of a Clinical Trial Database**

*T.K. Peters, M. Mehra, and E.N. Muratti*

**346S Safety and Tolerability of Fluvastatin With Concomitant Use of Antihypertensive Agents: An Analysis of a Clinical Trial Database**

*T.K. Peters, J. Jewitt-Harris, M. Mehra, and E.N. Muratti*

**353S Lipiduria in Renal Disease***C.P. Streather, Z. Varghese, J.F. Moorhead, and J.E. Scoble***358S Role of Lipoproteins in Progressive Renal Disease***A.K. Walli, E. Gröne, B. Miller, H.-J. Gröne, J. Thiery, and D. Seidel***367S Coronary Artery Disease in Diabetic Patients With Nephropathy***Connie L. Manske***375S Pharmacokinetics of Fluvastatin and Specific Drug Interactions***H.T. Smith, L.A. Jokubaitis, A.J. Troendle, D.S. Hwang, and W.T. Robinson*

## NUMBER 12, DECEMBER 1993

---

**ORIGINAL CONTRIBUTIONS****983 1,25-Dihydroxyvitamin D as a Cardiovascular Hormone. Effects on Calcium Current and Cytosolic Free Calcium in Vascular Smooth Muscle Cells***Jie Shan, Lawrence M. Resnick, Richard Z. Lewanczuk, Edward Karpinski, B. Li, and Peter K.T. Pang***989 The Cohen Diabetic (Non-Insulin-Dependent) Hypertensive Rat Model. Description of the Model and Pathologic Findings***A.M. Cohen, E. Rosenmann, and T. Rosenthal***996 Antihypertensive Effects of Oral Calcium Supplementation May Be Mediated Through the Potent Vasodilator CGRP***Sunil J. Wimalawansa***1003 Lateral Diffusion and Fatty Acid Composition in Vascular Smooth Muscle Membrane From Stroke-Prone Spontaneously Hypertensive Rats***Anna F. Dominiczak, Yvonne McLaren, John R. Kusel, Dennis L. Ball, Theodore L. Goodfriend, David F. Bohr, and John L. Reid***1009 Effects of Captopril on Sympathetic Activity, Lipid and Carbohydrate Metabolism in a Model of Obesity-Induced Hypertension in Dogs***Rafael G. Robles, Eduardo Villa, Rosa Santirso, Javier Martínez, Luis M. Ruilope, Carmen Cuesta, and José M. Sancho***1016 Role of Presynaptic  $\beta_2$ -Adrenergic Facilitation in the Development and Maintenance of DOCA-Salt Hypertension***Pierre Moreau, Guy Drolet, Nobuharu Yamaguchi, and Jacques de Champlain***1025 A Comparison of the Effects of Nifedipine and Verapamil on Exercise Performance in Patients With Mild to Moderate Hypertension***Alan K. Halperin, Milton V. Icenogle, Curtis O. Kapsner, Thomas W. Chick, Joy Roehnert, and Glen H. Murata***1033 Peripheral Vascular Changes and Ambulatory Blood Pressure Profiles***Daniel Duprez, Marc De Buyzere, Johan De Sutter, Tine De Backer, and Denis L. Clement*

**1040 Hemodynamic and Neurohumoral Effects of Fish Oil in Hypertensive Patients**

*Ehud Grossman, Edna Peleg, Eyal Shiff, and Talma Rosenthal*

**1046 Urinary Endothelin: A Possible Biological Marker of Renal Damage**

*Zaid A. Abassi, Henry Klein, Eliahu Golomb, and Harry R. Keiser*

**1055 Effect of Withdrawal of Antihypertensive Drug on Depressive Mood**

*Len Thaler, Sylvia Wassertheil-Smoller, M. Donald Blaufox, Albert Oberman, and Herbert G. Langford*

---

LETTER TO THE EDITOR

**1063 Compliance in Hypertension: Daily v Twice Daily**

*John J. Sramek, Neal R. Cutler, Randall D. Seifert, and Azucena D. Luna*

---

EDITORIAL

**1064 In Memoriam Austin Eric Doyle 1923-1993**

*Colin Johnston*

---

**1066 ERRATA**

---

**1067 LIST OF REVIEWERS**

---

**1070 AUTHOR INDEX, VOLUME 6**

---

**1101 SUBJECT INDEX, VOLUME 6**

---

**1106 CUMULATIVE TABLE OF CONTENTS, VOLUME 6**

